

REMARKS

The present application has not been amended at this time.

With regard to the Notice of Non-Compliant Amendment, it is respectfully submitted that the present response corrects the deficiency noted by the Examiner with regard to Claim 19. It is respectfully submitted that the present response is substantially the same as the Response which the undersigned agent filed on July 2, 2007 with two exceptions.

First, Claim 19 was missing a portion of the text so it appeared that the intent was to amend Claim 19. This portion of text was inadvertently omitted. Thus, the present response sets forth Claim 19 as it appeared in the Amendment presented on January 8, 2007. The January 8, 2007 amendment was not entered. It is noted by Applicants that Claim 19 was not amended at that time.

The second exception relates to Claim 22 as set forth in the response filed on July 2, 2007. When reviewing the claims to prepare the present Revised Response, it was noted by the undersigned agent that the term "wherein" in Claim 22 was inadvertently placed immediately above the structure within component (1) of Claim 22, instead of immediately after the structure. Upon reviewing the past responses and amendments, it became evident that this misplacement occurred in the Amendment submitted by Applicants on January 8, 2007 (which was not entered). The Amendment filed by Applicants on August 22, 2006 shows the "wherein" within component (1) of Claim 22 in the proper place. Accordingly, Claim 22 has also been corrected such that it appears as set amended in the August 22, 2006 Amendment.

It is believed that the present response is now in compliance with the Rules of Practice.

Claims 11-16, 19 and 22-27 were rejected under 35 U.S.C. § 102(b) as being anticipated by the WO 87/03886 (the Hoffman reference).

The Hoffman reference (WO 87/03886) discloses a process for preparing for forming dispersants and a process for preparing polymer polyols from these dispersants. This process comprises (a) forming a dispersant by homopolymerizing a vinyl-terminated adduct or copolymerizing a vinyl-terminated adduct with at least one ethylenically unsaturated monomer, in the presence of an active hydrogen compound as a solvent in conditions such that the dispersant has a Brookfield viscosity of less than 25,000 cps (at 25°C) as a 20-35 wt.% solution of the polymer of

the vinyl-terminated adduct in an active hydrogen-containing compound. See page 3, lines 15-32 and page 4, lines 24-30. These dispersants are clearly described as being soluble in the base polyol. See page 3, lines 25-26 and page 4, lines 28-29. The polymer polyols are prepared by (b) polymerizing an ethylenically unsaturated monomer or mixture thereof, in the presence of the dispersant and a base polyol under conditions such that the polymerized monomer forms a plurality of particles which are stabilized against agglomeration by the dispersant. See page 3, lines 35-42 and page 4, lines 35-40.

Applicants respectfully submit that the presently claimed pre-formed stabilizers are not properly rejected as being anticipated by the dispersants formed in step (a) of the Hoffman reference.

These dispersants are inherently different than the pre-formed stabilizers of which Applicants are claiming and thus, do not properly anticipate the pre-formed stabilizers of the invention. In particular, the dispersants of the reference are clearly described as being soluble in a base polyol. See page 3, lines 25-26; page 4, lines 28-29; page 10, lines 3-31; page 12, lines 5-6 and lines 35-39; page 31, lines 4-14; and page 34, lines 14-21 and lines 34-42. It is expressly disclosed by this reference that the "relative proportions of the vinyl-terminated adduct and the ethylenically unsaturated monomer (when used) are such that the dispersant has the required solubility" (see page 10, lines 5-10), and "too much of the ethylenically unsaturated monomer can cause the formation of an insoluble dispersant, which is undesirable" (see page 10, lines 19-21).

By comparison, the pre-formed stabilizers of the present invention are not soluble in the base polyol. Rather, the presently claimed pre-formed stabilizers are co-polymer dispersions which have a low solids content. The particle size of these dispersions is small, and this enables the particles to act as seeds in polymer polyol reactions. See page 2, line 19 through page 3, line 4; page 26, lines 27-31 and page 27, lines 1-8 of the present application.

It is respectfully submitted that the dispersants of the Hoffman reference form solutions in the base polyol as described in WO 87/03886. Applicants pre-formed stabilizers are dispersions, and thus, are not soluble in a base polyol. One of ordinary skill in the art would know and understand the difference between a dispersion such as the pre-formed stabilizers of the present invention, and a solution

such as that formed by the dispersants in a base polyol as disclosed in WO 87/03886. Accordingly, the dispersants of the WO 87/03886 reference do not properly anticipate the presently claimed pre-formed stabilizers and/or the process for preparing these pre-formed stabilizers.

In addition, all of the dispersants in the working examples of the Hoffman reference are prepared from vinyl-terminated adducts prepared by reacting isocyanatoethyl methacrylate with a relatively high molecular weight polyol (i.e. having a MW = 3100 to 4800, and functionality = 3). The macromer required by component (1) of Applicants' pre-formed stabilizers does not correspond to the structure of the vinyl-terminated adducts prepared in the examples of WO 87/03886.

Dispersants were then prepared from the vinyl-terminated adducts in WO 87/03886. The preparation of dispersants from these vinyl-terminated adducts as set forth in the examples is clearly different than the preparation of pre-formed stabilizers in accordance with the present invention. It is readily apparent that the relative amounts of components used to prepare the dispersants in the Hoffman reference is different than the relative amounts of components required for preparation of the presently claimed pre-formed stabilizers.

In particular, the dispersant of Example 1 of WO 87/03886 was prepared from about 8.1% of a polyol, 89.8% of the vinyl-terminated adduct, 2% of monomers (SAN) and 0.2% of a catalyst (all %'s are by wt.). The dispersant of Example 2 was prepared from about 18% of a polyol, 78.1% of vinyl-terminated adduct, 2.6% of monomers (SAN) and 0.2% of a catalyst (all %'s are % by wt.). Examples 2-5 and 6-9 used essentially identical amounts as Example 2. A chain transfer agent (carbon tetrachloride) was used in Example 10 of WO 87/03886. When taking the chain transfer agent (CTA) into account, the dispersant of Example 10 was prepared from 7.4% of a polyol, 81.9% of a vinyl-terminated adduct, 5.6% monomers (SAN), 0.6% of a catalyst and 4.5% of CTA. Without the CTA, the dispersant of Example 10 was prepared from 7.8% of a polyol, 85.8% of a vinyl-terminated adduct, 5.8% monomers (SAN) and 0.6% of a catalyst. Finally, the dispersant of Example 11 was prepared from 18.3% of a polyol, 80.5% of a vinyl-terminated adduct, and 1.2% of a catalyst. No monomers (SAN) were used to prepare the dispersant in Example 11.

Applicants respectfully submit that it is evident from the working examples of the Hoffman reference that the dispersants therein do not anticipate the pre-formed stabilizers of the present application. Both the process and product claims of the present invention require the pre-formed stabilizers to comprise (1) 10 to 40% by wt. of an ethylenically unsaturated macromer; (2) 10 to 30% by wt. of at least one ethylenically unsaturated monomer; (3) 0.01 to 2% of a free-radical polymerization initiator (i.e. a catalyst); and (4) 30 to 80% of a liquid diluent. In the dispersants of the Hoffman reference, it is "obvious" that the vinyl-terminated adduct therein is comparable to the macromer of the present invention; that the styrene and/or acrylonitrile monomers therein correspond to the presently required ethylenically unsaturated monomer(s); the catalyst of the reference corresponds the free-radical initiator of the present invention; and that the polyol therein is comparable to the liquid diluent of the present invention. However, the dispersants of WO 87/03886 comprise (1) 78.1% to 89.7% of vinyl-terminated adduct; (2) 2 to 5.8% of styrene and/or acrylonitrile (i.e. ethylenically unsaturated monomers); (3) 0.2 to 1.2% of a catalyst; and (4) 7.4% to 18.3% of a polyol. It is evident from this that there is no overlap between the presently claimed pre-formed stabilizer and the dispersants of the Hoffman reference.

Accordingly, this rejection is clearly improper and Applicants request that it be withdrawn.

Claims 11-16, 19 and 21-27, 29 and 31 were rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent 6,013,731 (the Holeschovsky et al reference).

U.S. Patent 6,013,731 is discussed in the background of the present application at page 3, lines 18-21 and at page 4, lines 12-21. In the Holeschovsky et al reference, the stabilizer precursors for pre-formed stabilizers which contain induced unsaturated are prepared from low-intrinsic unsaturation containing polyols. Stabilizer precursors are commonly referred to as macromers or macromonomers (see column 4, lines 52-55), and may be used directly in the production of polymer polyols (column 7, lines 8-17) or in the preparation of pre-formed stabilizers. The pre-formed stabilizers of this reference are prepared by polymerizing vinyl monomers *in situ* in the stabilizer precursor (i.e. the macromer), and optionally, in the presence of a polyol or low molecular weight diluent, thus forming a fine dispersion of vinyl polymer particles at relatively low solids content (column 7, lines 18-24).

Applicants respectfully submit that the Holeschovsky et al reference is the only reference relied on by the Examiner in the present rejections (see Office Action dated April 3, 2007, U.S. Patent 6,013,731) that discloses and/or describes pre-formed stabilizers as they are defined in/by the present application.

It is respectfully submitted, however, that Holeschovsky's pre-formed stabilizers are different than the presently claimed pre-formed stabilizers. This is evident in view of the different stabilizer precursors used in U.S. 6,013,731 compared to the presently required ethylenically unsaturated macromers.

More specifically, the stabilizer precursors of this reference are prepared from polyoxyalkylene polyols modified to contain induced ethylenic unsaturation, with the polyols initially having low levels of intrinsic unsaturation and a nominal functionality of 1 or more. See column 5, lines 37-60. The precursors are prepared by reacting a polyoxyalkylene polyol which contains low intrinsic unsaturation with a suitable compound to introduce the induced unsaturation into the product. Compounds which are suitable for introducing the induced unsaturation into the stabilizer precursors include unsaturated carboxylic acids and derivatives thereof, particularly anhydrides and acid chlorides (column 6, lines 27-45); molecules which contain both isocyanate functionality and a reactive unsaturated group (column 6, lines 46-63). Stabilizer precursors may be prepared ex situ, or in the case of amine-terminated low intrinsic unsaturation polyols, in situ, in a carrier polyol or diluent (see column 7, lines 1-11). Thus, the stabilizer precursors of the Holeschovsky et al reference are typically di- and higher functional materials.

Macromers of the present invention contain only one hydroxyl group. As discussed above, however, the stabilizer precursors of the reference are di-functional and higher functional materials. These higher functional stabilizer precursors of the Holeschovsky et al reference do not properly anticipate the presently required macromers which contain only one OH (hydroxyl) group.

As set forth above, in the Holeschovsky et al reference induced unsaturation is introduced into the macromers (i.e. stabilizer precursors) in one of two ways. First, it may be introduced through esterification (or amidation or imidation, for amine functional polyols) with an unsaturated carboxylic acid or derivative thereof. See column 6, lines 27-30. Second, induced unsaturation may also be added through reaction of a low intrinsic unsaturation polyol with a molecule that contains both

isocyanate functionality and a reactive unsaturated group. See column 6, lines 46-49. It is evident that it is the stabilizer precursors (i.e. macromers) of the Holeschovsky et al reference) that are prepared from low intrinsic unsaturated polyols. These stabilizer precursors may then be used to prepare polymer polyols, or pre-formed stabilizers which in turn may be used to prepare polymer polyols. Thus, the low unsaturated polyols disclosed by the Holeschovsky et al reference are not used to prepare pre-formed stabilizers.

This reference provides a detailed discussion of both induced unsaturation and intrinsic unsaturation. See column 4, line 56 through column 5, line 15 and lines 37-45 for a discussion of intrinsic unsaturation; and see column 5, lines 46-57 for a discussion of induced unsaturation.

With regard to the disclosure at column 3, lines 18-20 and at column 7, lines 28-31 that low molecular weight polyoxyalkylene/polyvinyl polymers that are soluble or remain soluble in the polyols as in WO/87/03886 may also be prepared but are "not preferred", it is respectfully submitted that for the reasons as discussed above, these preformed stabilizers are not the same as the preformed stabilizers of the present invention. It is readily apparent as previously discussed with regard to the Hoffman reference that the dispersants therein are soluble in polyols. It also appears that some pre-formed stabilizers of the Holeschovsky et al reference may be "soluble" in polyols. These are described therein as less preferred. The pre-formed stabilizers of the present invention are "obviously" not soluble in polyols.

The Holeschovsky et al reference discloses that the stabilizer precursors therein can be used directly in the preparation of polymer polyols, or to prepare pre-formed stabilizers which are used in the preparation of polymer polyols. See column 7, lines 9-10 and lines 18-19. The pre-formed stabilizers are prepared by polymerization of vinyl monomers (e.g. styrene and/or acrylonitrile) in the situ in the stabilizer precursor, and optionally, in the presence of an additional polyol or low molecular weight diluent to form a fine dispersion of vinyl polymer particles of a relatively low solids content. See column 7, lines 19-24.

It is further disclosed by this reference that these stabilizer precursors are prepared from low intrinsic unsaturation polyols (or monols) in which the molecular weight is $M_n > 3000 \times F^{0.39}$, in which F represents the average functionality of the low intrinsic unsaturation polyol (see column 8, lines 39-51). Thus, suitable low

intrinsic unsaturation monols have a minimum molecular weight of about 3000 (column 8, lines 51-54). By comparison, the maximum molecular weight of the monofunctional compound used to prepare the ethylenically unsaturated macromer (1) required by the present invention is close to 1000. This reference further discloses that the PMPOs therein prepared from the precursor stabilizers and pre-formed stabilizers based on these precursor stabilizers have excellent filterability, low viscosity and small particle size that can not be matched by stabilizer precursors prepared without low intrinsic unsaturation polyols of the minimum molecular weight (see column 8, lines 22-44).

Applicants direct the Examiner's attention to the working examples of the present application. None of Applicants examples contained a low intrinsic unsaturation polyol (or monol). Example 1a is a macromer prepared from a monol and Example 1b is a macromer prepared from a polyol. Macromer 1a had a MW = 6400, a viscosity = 2930 and contained 1 mol of induced unsaturation. Macromer 1b had a MW = 6000, a viscosity = 6500 and contains 0.71 mol induced unsaturation. In Example 2, macromers 1a and 1b were used to prepared pre-formed stabilizers 2a and 2b, respectively. The PMPO's 3, 4 and 5 were prepared from the pre-formed stabilizers 2b, 2a and 2a, respectively. It is evident from Table 2 on page 42 of the present application that PMPOs 4 and 5 have lower viscosity and improved filterability compared to PMPO 3. However, PMPO 3 was prepared from a pre-formed stabilizer in which the macromer was prepared from a 12000 molecular weight polyol with a functionality of 6.

In fact, PMPOs 4 and 5 have low viscosities and good filterability that are comparable to that of the PMPOs in the Holeschovsky et al reference which are prepared from stabilizer precursors prepared from low intrinsic unsaturation polyols and pre-formed stabilizers based on these stabilizer precursors. See PMPOs 11-16 in TABLE 1 at columns 15-16 of the '731 patent. This is true in spite of the fact that PMPOs 4 and 5 of the present application have slightly higher solids contents (i.e. about 50% by wt.) than the PMPOs of this reference which have solids contents of about 45% by wt. This is unexpected in view of the disclosure by Holeschovsky et al that the performance of stabilizers prepared from polyols having conventional levels of unsaturation can not match that of the stabilizers prepared from low unsaturation polyols. See column 8, lines 22-25 and lines 36-38.

While it may be accurate to state that the preformed stabilizers and the process for their production as described by the Holeschovsky et al reference is similar to that of the present invention, for the reasons as discussed above the pre-formed stabilizers and macromers (i.e. precursor stabilizers) of this reference are clearly different than the pre-formed stabilizers and macromers of the present invention. The Holeschovsky et al reference does not disclose the presently claimed invention with the specificity of an anticipatory reference. Applicants respectfully submit that this rejection is improper and request that it be withdrawn.

Claims 20, 21, 30 and 31 were rejected under 35 U.S.C. § 103(a) as being unpatentable over the WO 87/03886 (the Hoffman reference) in view of U.S. Patent 6,013,731 (the Holeschovsky et al reference).

It is respectfully submitted that combining the Hoffman reference (WO 87/03886) with the Holeschovsky et al reference (U.S. 6,013,731) does not render any of Claims 20, 21, 30 and 31 unpatentable under 35 U.S.C. § 103(a).

Claims 20, 21, 30 and 31 of the present application are specifically directed to the diluent which is used to prepare the claimed pre-formed stabilizers. More specifically, the diluent of the present invention is specifically either a monohydroxyl alcohol as in Claims 20 and 30, or a poly(xoypropyleneoxyethylene)polyol having an oxyethylene content of less than about 50% by weight and containing low unsaturation as in Claims 21 and 31.

Applicants respectfully submit that it is evident that the low intrinsic unsaturated polyols of the Holeschovsky et al reference are described as being used to prepare the stabilizer precursors (i.e. macromers) therein. These stabilizer precursors may be used to prepare polymer polyols or pre-formed stabilizers. This reference does not disclose or suggest the use of low intrinsic unsaturation polyols to prepare pre-formed stabilizers. The use of such low unsaturation containing polyols as diluents for pre-formed stabilizers is, however, the subject matter of Claims 21 and 31. The Holeschovsky et al reference does not disclose this!

Furthermore, as Applicants previously discussed, the presently claimed pre-formed stabilizers and process for their preparation are not disclosed by the Hoffman reference. The dispersants of this reference are clearly soluble in polyols. The pre-formed stabilizers of the Holeschovsky et al reference are also different than those of the present invention. Applicants claimed pre-formed stabilizers are prepared from

ethylenically unsaturated macromers which are monofunctional with respect to the number of hydroxyl groups present. The macromers or stabilizer precursors of the Holeschovsky et al reference have at least two hydroxyl groups. It is evident that different starting materials which have different functionalities and/or molecular weights are required in these references compared to the scope of the present claims. Applicants therefore submit that any disclosure by either Hoffman or Holeschovsky et al of diluents which overlap with the monohydroxyl alcohols of Claims 20 and 30 or with the polyols of Claims 21 and 31, combined with the Hoffman reference does not fairly suggest the presently claimed invention to one of ordinary skill in the art.

Claims 21 and 31 of the present application require a poly(oxypropyleneoxy-ethylene) polyol which contains low unsaturation. This type of unsaturation is clearly intrinsic unsaturation and would be clearly understood as such by one of ordinary skill in the art. The Holeschovsky et al reference describes both intrinsic unsaturation and induced unsaturation. See column 4, lines 31-44 and 56-61; column 5, lines 23-57; and column 6, lines 12-63. Intrinsic unsaturation is the level of unsaturation in a polyol which inevitably occurs due to rearrangement of reactant or product molecules to contain unsaturated sites (see column 5, lines 37-40). DMC catalysts are known to be able to produce polyols which have low intrinsic unsaturation (see column 5, lines 26-31). By comparison, induced unsaturation is unsaturation that is intentionally introduced into the polyoxyalkylene polyether, and particularly those polyethers which are to be used in stabilizer precursors (see column 5, lines 46-50).

The stabilizer precursors (i.e. macromers) of the Holeschovsky et al reference which contain induced unsaturation (particularly from maleic anhydride or TMI) is added to a polyether polyol which has low intrinsic unsaturation. See column 6, line 46 through column 7, line 10. These stabilizer precursors are then used in the preparation of pre-formed stabilizers in the presence of a polyol or low molecular weight diluent such as isopropanol. See column 7, lines 17-24. These polyols are described therein as being conventional base-catalyzed polyols (column 7, lines 12-14). For the reasons as discussed above, the macromers are different than the macromers required by the present invention, and thus, the pre-formed stabilizers are different. Accordingly, it is respectfully submitted that the low intrinsic

unsaturation polyols of Claims 21 and 31 are not fairly suggested as suitable diluents for pre-formed stabilizers by the Holeschovsky et al reference. The Hoffman reference is also silent in this regard. Therefore, this combination of references does not properly suggest the invention of Claims 21 and 31.

Finally, the fact that neither the Hoffman reference or the Holeschovsky et al reference describes the presently required ethylenically unsaturated macromers that are essential to the pre-formed stabilizers of the present invention, makes it evident that this combination of references can not properly render the presently claimed invention obvious to one of ordinary skill in the art. In the absence of a reference which describes the presently required macromers, it is respectfully submitted that these references do not render the presently claimed invention obvious to one of ordinary skill in the art. Accordingly, the rejection of Claims 20, 21, 30 and 31 as being obvious in view of the Hoffman reference combined with the Holeschovsky et al reference is improper and Applicants request that this rejection be withdrawn.

Claims 11-16, 19, 22-27 and 29 were rejected under 35 U.S.C. § 103(a) as being unpatentable over the U.S. Patent 4,680,358 (the Yu reference).

Styryl terminated macromolecular monomers of polyethers are disclosed by the Yu reference (U.S. Patent 4,680,358). Applicants discuss this reference on page 6, lines 1-9 of the present application. These styryl terminated macromolecular monomers of polyethers are prepared by polymerizing (A) a cationically ring-openable cyclic ether selected from alkylene oxides and glycidyl ethers (see structures I and II at column 3, lines 34 through 65), and (B) a monoolefinically (i.e. styrylly) unsaturated primary or second alcohol which corresponds to structure III (see column 4, lines 1-20), in the presence of (C) a cationic initiator. The resultant macromers have the structure $R-(M)_m-OH$, in which R represents the residue of the styrylly unsaturated alcohol, M represents the residue of at least one cyclic ether which is ring-opened, and m represents an integer in the range of from 2 to 500. The Yu reference also discloses that macromer block copolyethers can be prepared by polymerizing plural cyclic ethers sequentially, or by using a macromer as a propagator to yield compositions of structure V (column 4, lines 41-48); and random copolymers of these macromers by polymerizing macromers of structure IV or V with an olefinically unsaturated monomer to yield compositions of structure VI_a or VI_b (see column 4, lines 49-68).

Applicants respectfully submit that the rejection of the present invention as being anticipated by the Yu is improper in view of the preceding amendments to Claims 11 and 22. It is evident that the ethylenically unsaturated macromer, component (1), of the present claims is always monofunctional with respect to hydroxyl groups, i.e. these only contain one OH group. This is apparent from the amendment by which "m" now equals 1 in these ethylenically unsaturated macromers. By comparison, the macromers of the Yu reference have more than one OH group. Accordingly, the Yu reference does not properly anticipate the presently claimed invention.

Applicants' Claims 11 and 22 require specific ranges of components (1) the ethylenically unsaturated macromer, (2) the ethylenically unsaturated monomer, (3) the free-radical polymerization initiator, and (4) the liquid diluent for pre-formed stabilizers. More specifically, the present invention requires from 10 to 40% by wt. of component (1), an ethylenically unsaturated macromer; from 10 to 30% by wt. of component (2), at least one ethylenically unsaturated monomer; from 0.01 to 2% by wt. of component (3), at least one catalyst; and from 30 to 80% by wt. of component (4), a liquid diluent. The Yu reference does not disclosed or suggest these pre-formed stabilizers, process for preparing these PFSs or the ethylenically unsaturated macromers required..

In the Yu reference, Example 2 is the only portion that provides any detail into the use of these homomacromers as dispersants for polymerization of an unsaturated monomer (e.g. acrylic acid). Example 2 discloses reacting 115 g of acrylic acid (an ethylenically unsaturated monomer), 12 g of the PECH homomacromer from Example 1, 0.9 g of allyl pentaerythritol (a crosslinking agent), and 620 g of benzene (a solvent), in the presence of 0.14 g of lauroyl peroxide (a free radical initiator).

In the same terms as the present invention, Example 2 of the Yu reference contains about 1.6% of the macromer from Example 1 (i.e. PECH homomacromer), about 15.4% of ethylenically unsaturated monomer (i.e. acrylic acid), about 0.02% of free-radical initiator, and about 82.9% of solvent. Thus, it is evident that the quantity of macromer used in the Yu reference is much smaller than the quantity of ethylenically unsaturated macromers required by the present claims. Also, the amount of diluent in this example is higher than required by the present claims.

Applicants specifically point out that the present invention requires that the ethylenically unsaturated macromers be used in a quantity that is more than 6 (i.e. 6.25) times greater than that in the Yu reference, and that may be up to 25 times greater than the quantity in the Yu reference. With regard to the Examiner's statement that "[W]ith respect to the amount of solvent, the position is taken that one of ordinary skill in the art would have found it obvious to vary the amount of solvent so as to control properties such as viscosity; it has not been established that the amount of diluent utilized is critical. With respect to the amount of macromer, Ye teaches at column 10, lines 12-16 that the ratio of ethylenically unsaturated monomer to macromer (i.e.; relative amounts of macromer to ethylenically unsaturated monomer) may be varied, so as to control the properties of the resulting polymer; therefore patentee provides teaching that would motivate one to vary the amount of macromer, depending on the properties desired", Applicants respectfully disagree. (See page 6, paragraph 11, lines 4-11 of the Office Action dated April 3, 2007.)

The Yu reference does not disclose or suggest any information about the effect of the homomacromer content in the dispersant prepared in Example 2 on the viscosity or other properties in a polymer polyol. The dispersant prepared in Example 2 is used in an aqueous solution (see column 14, lines 52-61). Although the presence/absence of the macromer in the dispersant effected the viscosity (150 with macromer vs/ 400 without macromer), aqueous solutions prepared from these dispersants had similar viscosities (128,000 from dispersant with macromer vs. 129,000 from dispersant without macromer). See column 14, lines 52-58. Thus, the only "teaching" by the Yu reference is that the macromer improves polymerization of the polymer.

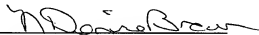
Applicants respectfully submit that the skilled artisan has no insight into the effect of the presently required quantities of the required macromers in pre-formed stabilizers, on the final properties of polymer polyols produced therefrom. As discussed above, Examples 4 and 5 of the present invention illustrate a decrease in viscosity and improved filterability in comparison to a similar PMPO in which only the type of macromer is varied. The Yu reference simply does not suggest these improvements to one skilled in the art.

It is respectfully submitted that the presently claimed invention is not fairly suggested by the Yu reference. Applicants submit that this rejection is improper and request that it be withdrawn.

In view of the preceding remarks, Applicants respectfully submit that each of these rejections is improper and request that they be withdrawn. The allowance of Claims 11-16, 19-27 and 29-31 is respectfully requested.

Respectfully Submitted,

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